Pending Claims

The following listing of claims replaces all prior versions and listings of claims in this application:

Listing of Claims

1. to 20. (Canceled)

21. (Currently amended) A machine for making a packaging cushion insert from sheet stock of cushioning material, the machine comprising:

a conveyor adapted to movably support the sheet stock and sequential discrete sheets of desired shapes;

one or more fluid jet cutting heads movable transversely and longitudinally relative to the conveyor and adapted to cut the sheet stock supported by the conveyor into the discrete sheets; and

a platform below the conveyor adapted to receive the discrete sheets from the conveyor, wherein the platform and conveyor are movable relative each other:

i) to place the discrete sheets in stacked arrangement on the platform when receiving the discrete sheets from the conveyor; and

ii) to compress the stacked arrangement of discrete sheets between the platform and the conveyor to produce the packaging cushion insert.

22. (Canceled)

23. (Currently amended) The machine of claim 21 ~~22~~ further comprising a computerized controller for controlling the movements of the conveyor, the one or more cutting heads, and the platform.

24. (Previously presented) The machine of claim 21 wherein the conveyor comprises a vacuum conveyor.

25. (Canceled)

26. (Previously presented) The machine of claim 21 further comprising an adhesion station upstream from the platform and adapted to apply an adhesive to the discrete sheets.

27. (Previously presented) The machine of claim 21 further comprising a heating station upstream from the platform and adapted to heat the discrete sheets.

28. (Currently amended) ~~The machine of claim 22~~ A machine for making a packaging cushion insert from sheet stock of cushioning material, the machine comprising:

a conveyor adapted to movably support the sheet stock and sequential discrete sheets of desired shapes;

one or more cutting heads movable transversely and longitudinally relative to the conveyor and adapted to cut the sheet stock supported by the conveyor into the discrete sheets, wherein the one or more cutting heads comprise:

a first set of one or more cutting heads movable transversely and longitudinally relative to the conveyor and adapted to cut inner scrap cutouts from the sheet stock supported by the conveyor; and

a second set of one or more cutting heads movable transversely and longitudinally relative to the conveyor and adapted to cut the sheet stock supported by the conveyor into sequential discrete sheets of desired shapes, wherein the second set of one or more cutting heads is downstream from the first set of one or more cutting heads;

a platform below the conveyor adapted to receive the discrete sheets from the conveyor, wherein the platform and conveyor are movable relative each other:

i) to place the discrete sheets in stacked arrangement on the platform when receiving the discrete sheets from the conveyor; and

ii) to compress the stacked arrangement of discrete sheets between the platform and the conveyor to produce the packaging cushion insert; and

a vacuum head adapted to lift the inner scrap cutouts from the conveyor, wherein the vacuum head is downstream from the first set of one or more cutting heads and upstream from the second set of one or more cutting heads.

29. to 30. (Canceled)

31. (Currently amended) The machine of claim 21 ~~22~~ wherein the one or more cutting heads are movably supported above the conveyor by rails.

32. to 33. (Canceled)

34. (Currently amended) ~~The machine of claim 33~~ A machine for making a packaging cushion insert from sheet stock of cushioning material, the machine comprising:

a conveyor adapted to movably support the sheet stock and sequential discrete sheets of desired shapes;

a plurality of cutting heads movable transversely and longitudinally relative to the conveyor and adapted to cut the sheet stock supported by the conveyor into the discrete sheets, wherein the plurality of cutting heads are adapted to cut multiple sheets of the same shape oriented across the conveyor perpendicular to the direction of travel of the conveyor; and

a platform below the conveyor adapted to receive the discrete sheets from the conveyor, wherein the platform and conveyor are movable relative each other:

i) to place the discrete sheets in stacked arrangement on the platform when receiving the discrete sheets from the conveyor; and

ii) to compress the stacked arrangement of discrete sheets between the platform and the conveyor to produce the packaging cushion insert.

35. (Currently amended) The machine of claim 21 wherein the platform is movable upwardly toward the conveyor to compress the stacked arrangement of discrete sheets between the platform and the conveyor to produce the packaging cushion insert.

36. (Currently amended) ~~The machine of claim 21~~ A machine for making a packaging cushion insert from sheet stock of cushioning material, the machine comprising:

a first conveyor adapted to movably support sequential discrete sheets of desired shapes; and

a platform below the first conveyor adapted to receive the discrete sheets from the conveyor, wherein:

the platform ~~further~~ comprises a second conveyor; and

the platform and first conveyor are movable relative each other:

i) to place the discrete sheets in stacked arrangement on the platform when receiving the discrete sheets from the conveyor; and

ii) to compress the stacked arrangement of discrete sheets between the platform and the conveyor to produce the packaging cushion insert.

37. (Previously presented) The machine of claim 21 further comprising a sheet stock feeding system upstream of the conveyor.

38. (Previously presented) The machine of claim 37 wherein the sheet stock feeding system is adapted to supply a continuous sheet of sheet stock of cushioning material to the conveyor.

39. (Previously presented) The machine of claim 37 wherein the sheet stock feeding system is adapted to supply individual portions of sheet stock of cushioning material to the conveyor.

40. to 47. (Canceled)

48. (Previously presented) A machine for making a packaging cushion insert from sheet stock of cushioning material, the machine comprising:

a conveyor adapted to movably support the sheet stock;

one or more cutting heads movable transversely and longitudinally relative to the conveyor to define a cutting area over the conveyor, and adapted to cut the sheet stock in the

cutting area over the conveyor while the sheet stock is supported by the conveyor into sequential discrete sheets of desired shapes; and

a platform adapted to receive the discrete sheets from the conveyor, wherein the platform and conveyor are movable relative each other:

i) to place the discrete sheets in stacked arrangement on the platform when receiving the discrete sheets from the conveyor; and

ii) to compress the stacked arrangement of discrete sheets to produce the packaging cushion insert.

49. (Previously presented) The machine of claim 48 wherein the platform and conveyor are movable relative each other to compress the stacked arrangement of discrete sheets between the platform and the conveyor to produce the packaging cushion insert.

50. (Previously presented) The machine of claim 48 wherein the conveyor comprises a vacuum conveyor.

51. (Currently amended) A machine for making a packaging cushion insert from sheet stock of cushioning material, the machine comprising:

a plurality of cutting heads movable transversely and longitudinally relative to the sheet stock and adapted to cut the sheet stock into discrete sheets of desired shapes;

a conveyor belt adapted to movably support the discrete sheets, wherein the plurality of cutting heads are adapted to cut multiple sheets of the same shape oriented across the conveyor belt perpendicular to the direction of travel of the conveyor belt; and

a platform adapted to receive the discrete sheets from the conveyor belt, wherein the platform and conveyor belt are movable relative each other:

i) to place the discrete sheets in stacked arrangement on the platform when receiving the discrete sheets from the conveyor belt; and

ii) to compress the stacked arrangement of discrete sheets to produce the packaging cushion insert.

52. (Canceled)

53. (Previously presented) The machine of claim 51 wherein the platform is below the conveyor belt.

54. (Previously presented) The machine of claim 51 wherein the platform and conveyor belt are movable relative each other to compress the stacked arrangement of discrete sheets between the platform and the conveyor belt to produce the packaging cushion insert.

55. (Currently amended) The machine of claim 51 wherein the plurality of cutting heads comprise fluid jet cutting heads.

56. to 57. (Canceled)